NORTH PENNINES ARCHAEOLOGY LTD

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NON-TECHNICAL SUMMARY

In August 2004 North Pennines Archaeology Ltd was commissioned by Mr Frank Lowe of Pentakan Ltd to undertake an archaeological building recording project of Hembles Gate Farm, Brampton, Cumbria. The work was required by Cumbria County Council Archaeology Service in response to a planning application for the erection of 16 dwellings, formation of an access road and refurbishment of the existing farmhouse. The work consisted of a rapid desk-based assessment and a 'Level 2' Building Survey.

The work involved the consultation of the County Sites and Monuments Record and the County Record Office in order to assess the existing information regarding the history of the farm and its historic, archaeological, topographical and geographical context. This was followed by a detailed photographic survey and written description of the archaeological sequence of the farm complex, excluding the farmhouse, and the location of each photographed feature onto a suitable base plan.

The site is situated to the south of the town of Brampton, adjacent to Tarn Road and consists of a complex of three ranges of buildings around a central courtyard. The buildings are shown on the first edition Ordnance Survey map and date to at least the mid 19th century and are consequently of archaeological importance.

The survey concluded that the standing buildings date to the late 18th or early 19th century and are of regional significance, with evidence of the use of water powered threshing activities.

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1 INTRODUCTION

- In August 2004, North Pennines Archaeology Limited was commissioned by Mr Frank Lowe of Pentakan Ltd, to undertake a building survey of farm buildings at Hembles Gate, Brampton, in Cumbria (NGR NY 5357 6052). The work was carried out prior to the demolition of three ranges of buildings (Planning Application Ref: 1/04/0628).
- 1.2 Cumbria County Council Archaeology Service produced a brief for a building recording project, which was to be undertaken prior to the commencement of building work. A 'Level 2' Building Survey was carried out as specified in *Recording Historic Buildings: A Descriptive Specification*¹
- The farm buildings at Hembles Gate, Brampton, are regarded as being of archaeological significance as they appear on the First Edition Ordnance Survey map of 1863, and are recorded on the County Sites and Monuments Record (SMR 40705). The farm buildings are to be demolished to allow for a housing development, however, the farmhouse (which does not form part of the present survey) is to be retained and renovated.
- 1.4 The building survey is concerned with three ranges that, together with the farmhouse, make up an enclosed courtyard (Figure 5), for ease of identification within this report, these ranges are referred to as A, B and C. To the south and west of these buildings are modern structures that are not included, although they need to be considered when assessing the farm in its more recent form. Located west of the farm buildings, and flowing south-north, is a mill race that butts up against one of the ranges, a sluice for the mill race is marked on the First Edition Ordnance Survey map of 1863 (Figure 4).
- 1.5 There appears to have been a property on this site since at least 1770, as 'Hemble Gate' is marked on the Hodskinson and Donald map of 1774 (surveyed 1770) (Figure 2).
- The survey was carried out in August 2004 by Fiona Wooler BA, PIFA, and Joanne Beaty BA.

¹ Recording Historic Buildings: A Descriptive Specification, RCHME, Third Edition, 1996, Swindon

2 SITE LOCATION

2.1 Hembles Gate Farm (Plate 1) is located less than 1km south-west of the market town of Brampton, on Tarn Road (B 6413), which heads towards Talkin Tarn c.1.5km to the southwest. The farm is sited at a height of c.100m above sea level, right beside Brampton Beck, a small stream that begins c.2km south-west of the farm, close to Brampton Station.



Plate 1 – Hembles Gate Farm, Tarn Road, Brampton

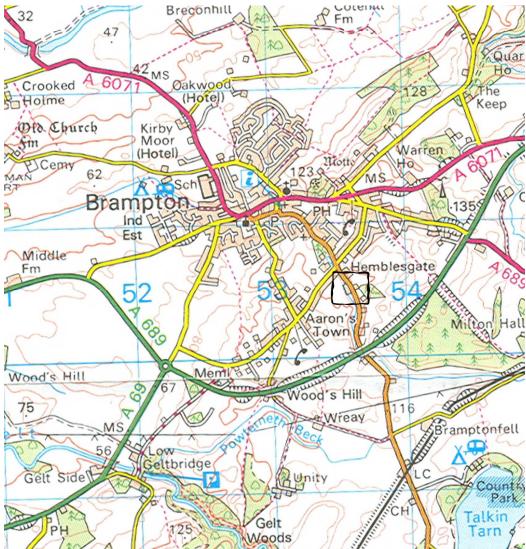


Figure 1 – Site Location

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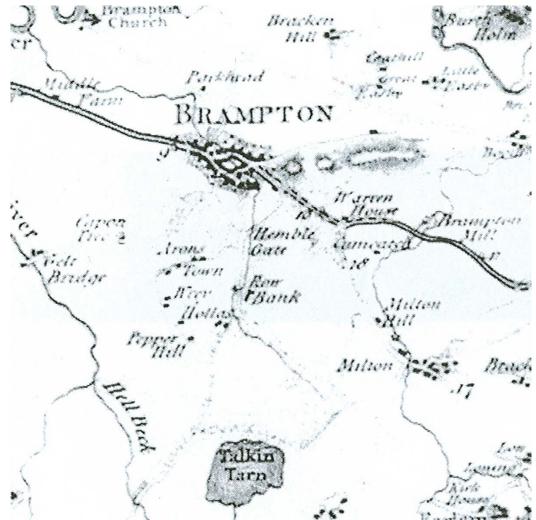


Figure 2 – Hodskinson and Donald map of 1774 (Surveyed 1770) shows 'Hemble Gate'

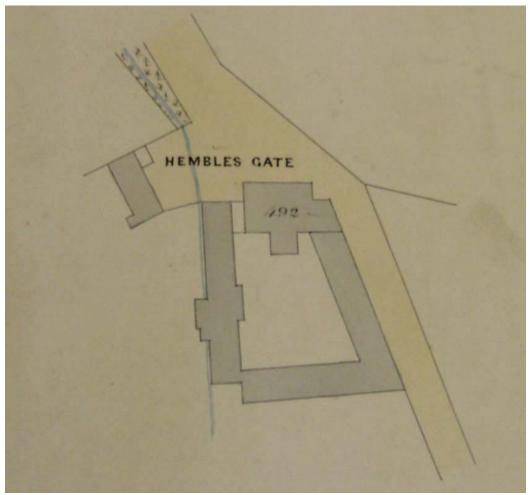


Figure 3 – Tithe Map of 1849

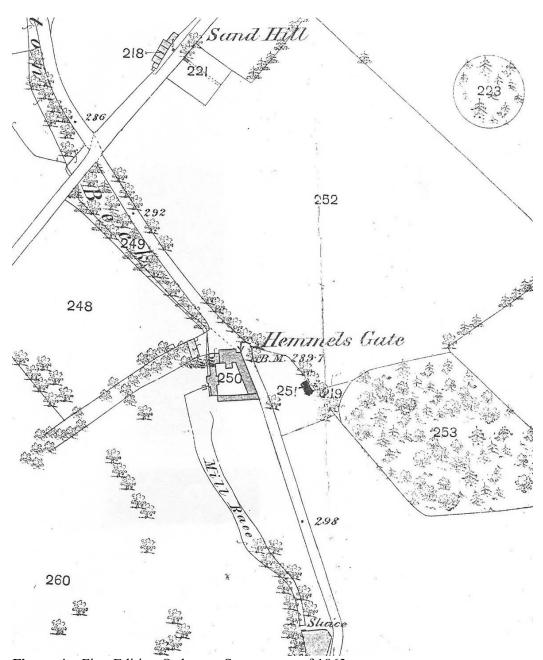


Figure 4 – First Edition Ordnance Survey map of 1863

3 AIMS AND METHODOLOGY

3.1 The Building Survey

- 3.1.1 The survey consisted of three basic elements:
 - a written account, which includes information derived from documentary research;
 - a measured survey with accompanying drawing;
 - a photographic record.

3.2 The Written Account

3.2.1 The written account is included in this document together with a selection of photographs, plan and appendix of documentary information.

3.3 The Photographic Record

- 3.3.1 The photographic archive consists of the following:
 - a series of 35mm black and white prints, which included general views of the exterior of the buildings, elevations and part elevations, along with specific external details (e.g. doorways);
 - a series of 35mm colour prints showing general views of the exterior of the buildings and their settings;
 - a series of 35mm transparencies showing general views of the buildings and their settings;
 - a series of digital views of the exterior of the buildings, the interior of the buildings and specific internal details (e.g. roof structure) supplied on CD-Rom.

3.4 Project Archive

3.4.1 The full archive of the desk-based assessment and Level 2 building survey have been produced to a professional standard in accordance with the current English Heritage guidelines set out in the *Management of Archaeological Projects* (MAP 2nd Edition 1991). The archive will be deposited within the County Record Office and a copy of the report given to the County Sites and Monuments Record, where viewing will be available on request.

4 PREVIOUS WORK

4.1 No previous archaeological work had been carried out on the site.

5 RESULTS

5.1 Range A (Figure 5 and Plate 2)



Plate 2 – Range A – Eastern elevation

5.1.1 Range A is located on the western side of the farm, and is constructed of coursed red sandstone masonry. Although the roof of the northernmost structure in this range has been stripped, the remainder of the roof coverings were of Welsh slate with sandstone ridge tiles. This range consists of three buildings, a byre (cow house), a bank barn and a central structure.

5.1.2 The Byre (Figure 5 and Plate 3)



Plate 3 – Byre, range A

- 5.1.2.1 This building measures c.15.4m by c.5.5m and was originally of two storeys, however the joists and beams of the upper floor have been removed and at the time of survey the roof of the byre was no longer covered. On the east facing elevation of this buildings (facing into the courtyard) there are several blocked apertures at both ground floor and first floor level (Plates 3 and 4). At ground level, one original doorway has been blocked-up to create a window (1), and a possible window has been blocked-in towards the gable end (2) (beside the ranging pole in Plate 3), although this aperture had no window surrounds.
- At first floor level, a doorway has been in-filled (Plates 3 and 4). It is most likely that this was originally a pitching hole, as there was no evidence for an external stone staircase, and a wooden ladder or similar would have obscured the doorway at ground level. Pitching holes are common in farm buildings, as they were used for the transference of hay or straw from the carts, to the dry conditions of the hayloft at first floor level. There is a window, with sandstone surround (3), and an unblocked doorway with dressed sandstone blocks making up the jambs (4) (Plate 4).



Plate 4 – Eastern elevation of Byre, Range A

5.1.2.3 On the northern gable end there is a further doorway at ground level (5), this gives access to the byre from outside the courtyard, and there is an owl hole close to the apex of the roof. On the western elevation, beside the millrace, there is a single small window.

5.1.3 The Byre Interior (Plate 5)

5.1.3.1 The byre is accessed through doorways in either the eastern or northern elevation. The byre (or cow house) was used during the winter to house cattle that were kept for either milk production, meat, breeding or as oxen for haulage purposes².

² Brunskill, R.W., 1982, Page 60



Plate 5 – Byre, Range A - Interior

- 5.1.3.2 This building is of six bays, the roof trusses are basic triangles of tiebeam and principal rafters constructed of machine-sawn timber. Each truss has a single angle strut on the western side. The floor and stalls are of concrete with a central passage, which allowed for the easy collection of manure to be used as fertiliser. There are eight stalls, all except one of which are double, providing accommodation for a maximum of fifteen cattle. The ceramic feeding troughs and metal water troughs are still *in-situ*, as are the vertical iron tethering bars, which were used to secure the cows. Ropes would have been used to tether the cow to the stall, and the vertical pole allowed the rope to move up and down, enabling the cow to lie down³.
- 5.1.3.3 The majority of the walls have been lime-washed (from stall height to the eaves), a common wall covering in Cumbria, which acts as a coating and disinfectant. Evidence for the first floor was not immediately observed as would be expected. Rafter holes were not visible, although they could have been filled in prior to the walls being whitewashed. There must have been a first floor at some point, due to the presence of the pitching hole already described. It is possible that only one half of the byre had another floor, as in the southern elevation there is a large doorway (6), with another pitching hole at an upper level (Plate 5). This doorway leads into the central section of the range.

³ *Ibid*, Page 62

5.2 The Central Section and Bank Barn (Figure 5 and Plate 6)

5.2.1 This building is located at the southern end of the range. Despite the fact that the byre described above and the rest of the range do not share a common ridge line, there is no evidence that suggests that they were built at different times as there is no construction break evident along the western elevation.



Plate 6 – Central section of Range A

- 5.2.2 The central section of this range projects out into the courtyard by c.1.0m and has alternating long and short sandstone quoins. This projection is often characteristic of threshing barns, where a canopy with cheeks was used to protect the main large doors into the barn where the hand-flail threshing of cereals was carried out during the winter months. There is, however, no evidence for the large doorways associated with threshing barns. Instead, a large modern doorway (7) with concrete lintel has cut through a blocked-up window at first floor level, a further window remains unblocked to the left, and another has been blocked and is situated just below the eaves.
- 5.2.3 To the left of the central section (Plate 7), there is a single ventilation slit, a blocked-up doorway converted to a window (8), an unblocked doorway (9) and a window (10), all with sandstone lintels. The doorways have dressed sandstone blocks making up the jambs. Along this part of the elevation, there are no apertures at first floor level.
- 5.2.4 The southern gable end of this range is separated from the courtyard by a wall that continues from this range to the gable end of Range B (Figure 5). This wall appears to have been constructed after Range A, as some of the quoins of the range have been removed to accommodate the wall and give it stability (Plate 8).



Plate 7 – Southern end of Range A



Plate 8 – Southern end of Range A, showing the wall built into the quoins

In the southern gable end of Range A is a large doorway (11) that is accessed up the bank behind the farm (Plate 9). This doorway allowed for laden carts of cereals, hay or straw to be brought to the farm and taken straight to the dry conditions of the first floor of the barn. This building can be described as a bank barn, as access to the first floor is via a bank, however, it is not a true bank barn as described by Brunskill⁴. At Hembles Gate, the land does rise to the south-west of the farm, but it is possible that the bank which gives access to this doorway has been man-made, and constructed in connection with the mill-race and culvert (Brampton Beck) that flows right behind this range. The doorway itself has nicely dressed jambs and voussoirs.



Plate 9 - Large doorway in southern gable end of Range A

- 5.2.6 The western elevation of the central section of his range and the bank barn was difficult to observe due to overgrown vegetation. A mill race flows alongside this range and the ground level is higher at the southern end of the elevation than it is at the northern, consequently it was not possible to photograph all the features along this elevation.
- Midway along this elevation, there is a circular hole cut into the wall (12), with the remains of a square metal plate that originally surrounded the hole (Plate 10). This hole would have been for the axle of a waterwheel, which was driven by the mill race (Plate 11), and which subsequently drove machinery situated inside the central section of this range. Until recently, there appears to have been either a building or a roof over this part of the mill race, as the scarring for the roof can clearly be seen on Plate 10, as can the remains of the render. This structure would have protected the waterwheel against frost, especially if it was not in constant use, and would have allowed the grease to stay on the bearings longer⁵. In some cases, scarring from the waterwheel itself can be observed etched into the wall through use over the years, this can give an indication of the diameter of the wheel⁶, however, there was no evidence of this at Hembles Gate.

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⁴ Brunskill, R.W., 2002, Page 105 – True bank barns are normally sited with their lengths along the contours and large doorways situated in the long axis, variant bank barns are sited across the contours

⁵ Davies-Shiel, 1978, Page 61

 $^{^6}$ For example at Denton Mill, Naworth, Brampton, a wheel diameter of c.5.8m was observed. See Cracknell, P.M, Wooler, F, Giecco, F, 2003, Page 5



Plate 10 – West elevation, Range A – waterwheel axle hole and scarring of roofline

Just above the waterwheel axle hole, to the right, is a window with sandstone surrounds (just visible in the top right hand corner of Plate 10). This window would have been undercover when the roof over the wheel was in existence.



Plate 11 – Western elevation of Range A, mill race

5.2.8 Central section and bank barn of Range A – Interior

5.2.8.1 The interior of the central section of Range A is accessed via the large modern doorway (7) from the courtyard (Figure 5). The floor is of concrete and the walls have been limewashed. To the right of the entrance is the doorway that allows access into the byre (6). To the left of the main entrance is another doorway (13) set at a height of c.1.0m above ground level. There were no steps *in-situ* at the time of survey from ground level, therefore presumably at some time wooden portable steps were used. This entrance gives access to the first floor of the 'bank-barn' via five stone steps (Plate 12).



Plate 12 – Doorway in Range A, gives access to the bank barn

- 5.2.8.2 On the wall opposing the entrance to the central section is a small wooden door with an iron handle measuring c.0.8m by c.0.8m, that has been nailed to the wall, above which is a large piece of dressed sandstone (Plate 13). This would appear to relate to the axle hole observed on the external western elevation of this range. This would suggest that it was in this room that the gearing for the waterwheel and the machinery that drove the thresher was located, although there is no other evidence visible.
- 5.2.8.3 At the southern end of Range A, at ground floor level, is another byre, this one is smaller than the one at the northern end measuring c.8.8m by c.5.4m. The floor has been concreted providing a central manure passage, however, in this byre, the four double stalls are of timber. Still *in-situ* are the ceramic feeding troughs, metal water troughs and iron tethering bars with chains. The walls and the timbers of the ceiling have been limewashed. Supporting two of the beams for the floor above are nicely carved corbels (Plate 14).



Plate 13 – Wooden door covering axle hole, Range A



Plate 14 – Stalls in southern end of Range A

5.2.8.4 The first floor of the central section of the range and the bank barn are accessed either via the large double doors (11) in the southern gable end, or via the doorway (13) and stairs observed in the central section (Plate 12). The first floor is split level, with the higher end being located above where the machinery for the waterwheel would have been located. The first floor is of six bays and the roof trusses are basic triangles of tie-beam and principal rafters, although unlike the byre at the northern end of the range, these trusses are hand cut. Often, roof trusses display carpenter's marks, or assembly marks, which were numerical sequences used to ensure the roof trusses were put together

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in the right order.

5.2.8.5 Often these marks are a debased form of Roman numerals⁷, and these are observed in the other ranges at Hembles Gate. However, in Range A, the carpenter's marks are unusual as they are circular holes cut into the timber, although they do run in sequence: -

0 00 000 0000

Visible from the first floor, is the blocked window seen at eaves level on Plate 6, the door or pitching hole in the gable between the central section and the northern byre (Plate 5), and the unblocked window above where the waterwheel axle was located in the western elevation (Plate 10). Set in the wooden floor of the lower side of the first floor is a hatch, which would have been used for the transference of hay, straw or grain to the byre below.

⁷ Morris, R.K., 2000, Page 68

5.3 Range B (Figure 5 and Plate 15)



Plate 15 – Range B (Slated structure behind the later lean-to)

- 5.3.1 This building measures c.30m along its southern elevation by c.5.4m, and is of single-phase construction of coursed and dressed red sandstone masonry. What remained of the roof covering was of Welsh slate with sandstone ridge tiles, with skylights inserted into the north facing side. To the northern elevation of Range B, is a later lean-to of stone, corrugated sheeting and timber, this has obscured one of the three arched doorways that are located along this elevation (Plate 16). The arched doorway at the western end of this elevation has been partly filled in (14) with a modern door inserted. These archways have nicely dressed jambs and voussoirs of red sandstone and there is a slight chamfer along the edges (Plate 17). There are three small windows along the northern elevation, one of which was originally a doorway (15), these windows have sandstone lintels, which display tool marks.
- 5.3.2 On the western gable end of Range B, there is a single window close to the apex of the roof (Plate 18). Most of this elevation is obscured by the bank, which allowed carts to enter the first floor of Range A (southern end) through the large double doorway (11).
- 5.3.3 Along the southern elevation of Range B, there are four windows and two doorways (16 & 17), all with sandstone lintels.



Plate 16 – Range B, partly filled-in arched doorway



Plate 17 – Range B, arched doorway at eastern end of northern elevation



Plate 18 – Western gable end of Range B

5.4 Range B - Interior

- This range has most recently been used as a milking parlour and byre. The building is divided into three sections internally. At the western end is the dairy, with the milk tank still *in-situ*. The floor of the dairy is of concrete and the walls have been plastered. There is one king post roof truss at this point, which has a carpenter's mark of VII. The dairy is separated from the rest of the range by a stone partition wall.
- 5.4.2 The middle and eastern sections of the range have been used as the milking parlour. The two sections are separated by a stone partition wall. Both sections have concrete floors with a central manure passage, and the stalls are of concrete with ceramic feeding troughs, metal water troughs and tethering bars are still *in-situ*. The walls have been plastered from ground level to the height of the top of the stalls; the remainder of the wall is limewashed to the eaves (Plate 19).
- 5.4.3 The middle section is of five bays and there are five double stalls and one single stall, providing accommodation for a maximum of eleven cows. The king post roof trusses of machine sawn timber in this section display carpenter's marks of III to VI, running east-west (Plate 20). The eastern section of this range is accessed through a large doorway (18) in the partition wall dividing it from the central section. This part of the range is of four bays with five double stalls providing accommodation for a maximum of ten cows.

5.4.4 Of the three roof trusses in this section, only one has a carpenter's mark. This is on the eastern- most truss and has the mark VIII, therefore the carpenter's marks do not run in number order from east to west, except from the middle to the western end. Attached to one of the trusses in the eastern section are three metal plates, which are prize's won by the farmer (possibly John Foster, who is listed as being at Hembles Gate in 1954 – see Appendix) at Brampton Agricultural Show in the 1950's (Plate 21).



Plate 19 - One of the double stalls in Range B



Plate 20 – Carpenter's (or assembly) marks on a roof truss in Range B



Plate 21 – Prize's won at Brampton Agricultural Show – Range B

What is noticeable about Range B is that access for the cows into the milking parlour may have been through the northern elevation, which faces the courtyard. The doorways on the southern elevation (16 & 17) seem too small to allow access for the animals, therefore the cows would have had to be brought in from the fields via the main gate off the road. This would therefore suggest that the pasture for the cows was across the road, and this seems to be confirmed by sales particulars for the farm of 1920 (Figure 6), when Hembles Gate Farm was up for sale along with 130 acres of pasture, arable land and woodland shown as Lot 1 on Figure 6, this was land across the road from the farm.

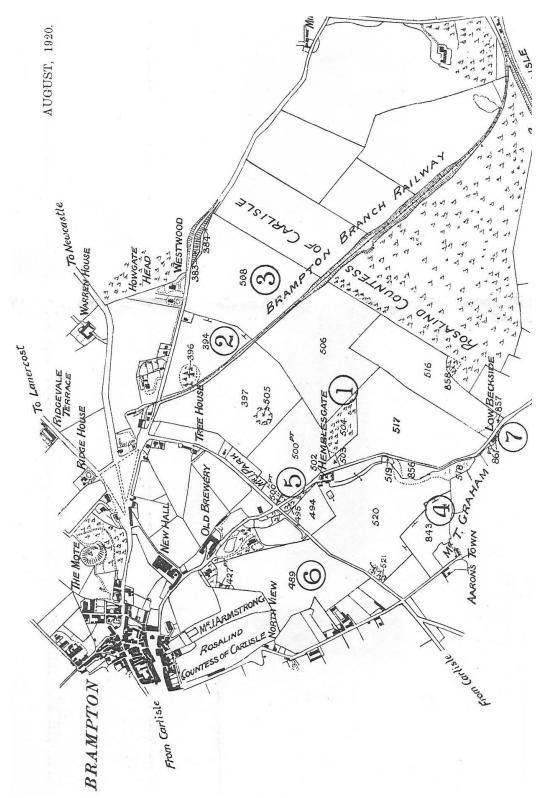


Figure 6 – 1920 Map showing Lot 1 – Hemblesgate Farm and 130 acres of land, all across the road from the farm buildings

5.5 Range C – Figure 5 and Plates 22 and 23



Plate 22 – Western elevation of Range C

- 8.5.1 Range C runs parallel to Tarn Road and links the rest of the farm buildings with the farmhouse (Figure 5). It is constructed in a similar manner to the rest of the farm buildings, but unlike them, this range has ventilation slits at ground and first floor level all along the western facing elevation. A more recent addition to this elevation is the blue 'lean-to' made from corrugated metal sheeting and timber. Most of the range is of two storeys; however, at the southern end there is a single-storey room with a large arched doorway (19) similar to those in Range B. The roof is of Welsh slate with skylights inserted to provide extra light for the first floor.
- The eastern elevation of Range C faces the main road (Plate 23). Along this elevation there is a pitching door at first floor level and a window (20), which belongs to the washroom of the farmhouse. This range appears to butt up against the quoins of the farmhouse from an approximate height of 1m from the ground (beside the blue drainpipe in Plate 23). This would suggest that Range C was possibly constructed after the farmhouse, although the similarity of the stonework continuing from the farmhouse to the farm buildings, below where the quoins start, contradicts this. It therefore seems more likely that Range C was originally only one-storey high and that where the walls have been raised is from where the quoins of the farmhouse start.



Plate 23 – Eastern elevation of Range C

5.6 Range C - Interior

5.6.1 The southern end of the range is of one-storey and is more a continuation of Range B. This part of the range appears to have been most recently used as a stable or loose box, as the hay rack is still *insitu*. In the northern gable of this room, there is a recess (24) in the wall at ground level with a window above (Plate 24).



Plate 24 – Recess and window in gable – Range C

5.6.2 This recess may have been used for the storage of grooming tools, medicine or candles⁸, used while attending to horses, which may have been stabled in this room. The window above could have been used to move hay from the loft of the next part of the range.

⁸ Brunskill, R.W., 1982, Page 75

The next two doorways along the western elevation of Range C (21 & 22), give access to calf pens, two either side of each doorway. The floor of these pens is of concrete, but the stall divisions and the feeding troughs are of timber. These pens have low ceilings, which only just allow a person to stand straight. Separating each pair of pens is a stone wall of dressed red sandstone that supports the beams for the ceiling above (Plate 25). The walls have been limewashed. At the base of the wall of the first calf pen (set into the gable end), there are the remains of some quoins, which presumably belonged to an earlier building (Plate 26).



Plate 25 – Low ceiling of the calf pens in Range C



Plate 26 – Southern gable end of Range C, remains of quoins

- 5.6.3 Beyond the calf pens is a further room accessed from a doorway (23) in the western elevation. This room has a cobbled floor and has most recently been used as a coal house and for storage. To the left of the entrance is a wooden staircase which gives access to the first floor.
- The first floor of Range C is of ten bays and extends over the whole of the range of farm buildings and over the washroom of the farmhouse. The roof trusses are basic triangles of tie-beam and principal rafters, which rest on sandstone wall plates. The timbers used in the construction of the roof are hand-cut and bark is still visible on some of the wood. Carpenter's marks are visible, and run in order (north-south) from I to VIIII. These numerals are deeply cut, probably from using a chisel and they are quite different from those observed in Ranges A and B (Plate 27). Un-used slots for purlins are visible in these timbers, this suggests that either the timbers have been re-used, or that the most recent roof covering needed smaller holes for the purlins, and were therefore cut further up the truss (Plate 27). The underside of the roof has been felted.



Plate 27 – Carpenter's marks – Range C

In the southern gable end of this range, there is scarring in the wall of a smaller gable that suggests there was an earlier building on the site (Plate 28). The stonework directly above this scarring is well-dressed coursed sandstone, yet the masonry to the right and that which makes up the apex of the roof, is roughly dressed rubble sandstone. This is further evidence that there may, at one time, have been a single-storey building on this site (See 5.6.2).

5.6.6 The addition of an extra floor to an earlier single-storey building is, however, not evident on the western facing elevation (Plate 22). It is possible that the rubble masonry shown to the right of the earlier gable in Plate 28 may be related to the rebuilding of the range, creating a wider and taller structure, in which case the western elevation would be of single-phase construction. The quoins observed at ground floor level, in the calf pens, may relate to this earlier gable, which could be the remains of a building to the south of this wall (where the single-storey loose box/stable is located, as described in 5.6.1).



Plate 28 – Scarring of an earlier building in the southern gable end of Range C

The doorway observed on the eastern, external elevation of Range C (Plate 23), would have allowed for the transference of hay, straw or grain from loaded carts on the roadside to this first floor loft. The storage of straw or hay at first floor level was common practice as it kept the bales dry, but it also provided insulation for the animals below.

6 CONCLUSIONS

6.1 Although the farm buildings at Hembles Gate Farm are clearly not of national importance, on a regional level they are significant in that they represent the investment put into buildings that were constructed to harness the power of water. The hand-operated threshing machine was successfully developed in Scotland by Andrew Meikle in 1786, this allowed for the process of threshing cereals to release the grain from the stalk, to become much quicker and therefore more efficient. The next obvious development in threshing was the harnessing of a form of power, other than human, that allowed the process to be less labour intensive. Some farms used horses, and there are still many gin-cases or horse-engine houses, standing attached to the barns in which the threshing machinery was housed.9 Other forms of power included using windmills, which John Curwen installed in 1807 to drive his wind-powered threshing machine at Workington (Schoose Farm)¹⁰. Water was a source of power that was cheap and easily controlled, although the machinery could be expensive and water was not always available¹¹. This does not appear to have been a problem at Hembles Gate, as the machinery was still in use as late as 1920, when the farm was up for sale. The sales particulars of that date describe a 'threshing barn with machinery driven by water power' (See Appendix).

Cartographic evidence shows that there seems to have been a property on this site by 1770 (Figure 2), although it is unlikely that this was the farm that exists in the form it does today. Given that threshing machinery had not been invented until the late 18th century, it is possible to suggest that the farm buildings that are the subject of this survey were constructed in the late 18th or early 19th century. The Georgian doorway of the farmhouse with fanlight window above (Plate 1) also dates to this period¹². The farm was certainly in existence in its present form by 1849 (Figure 3), when it was owned by Thomas Ramshay, agent to the Earl of Carlisle. If it had been in the hands of the Ramshay family for years prior to 1849, there is no doubt that the advantages of an efficient, organised farmstead would have been known by its owners.

Range A was where the business of threshing the corn was undertaken, as it is in the central section of the building that the waterwheel and machinery would have been located. The corn to be processed would have been brought into the building at first floor level, via the large doors on the southern elevation. The waterwheel would most likely have been undershot, as these were very common in northern

⁹ For an example of a recently recorded gin-case see Wooler, F, and Jones, C., 2004

¹⁰ Wade Martins, S, 2004, Page 83

¹¹ Brunskill, R.W., 1982, Page 51

¹² Brunskill, R.W., 2002, Page 179

Cumbria¹³. This means that the wheel was driven by water at its base, rather than by means of an aqueduct feeding water onto the top of the wheel. Undershot wheels needed a retaining pond, or reservoir, to store water up-stream, which would then be released through a sluice to power the wheel. At Hembles Gate, there is a sluice and reservoir shown on the First Edition Ordnance Survey map of 1863 (Figure 4), south of the farm.

- Range B, and the southern end of range C, have the large arched doorways that would have allowed for carts to be stored. It is possible that Hembles Gate was used by local farmers to process their grain, as not every farm would have had their own threshing machine.
- Range C is the only range of the farm that displays evidence of there having been an earlier structure on the site. The scarring of a roofline and the quoins seen at the southern end of the range, and the way that the range butts up against the quoins of the farmhouse at the northern end, suggests that there was a single-storey building on the site, prior to its conversion to two-storey. There is a possible difference in building stone along the eastern elevation of this range (Plate 23) but the sandstone has weathered somewhat and therefore this is not immediately apparent. There is no evidence of an extra storey having been added on the western elevation (Plate 22), but this is possibly because the whole building was not only heightened but also widened, and that the whole western elevation was re-built
- The hundred years between 1750 and 1850 saw immense changes in agriculture in Britain. Growth in the population, the large-scale enclosure of land and increased awareness of scientific knowledge in agricultural practices, meant that farms and farmers had to be more efficient and organised. This period saw a great deal of re-building of agricultural buildings to cope with new demands. The farm buildings at Hembles Gate generally appear to have been planned and constructed as a single unit, rather than adding to existing structures that may have haphazard in plan. These buildings represent the investment that was put into an agricultural enterprise, and they are a good example of how a farm utilised the power of water.

¹³ Davis-Shiel, 1978, Page 29

7 BIBLIOGRAPHY

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8 APPENDIX

CRO - Carlisle Record Office

The History of the County of Cumberland – William Hutchinson Volume I 1794

'Brampton is situated in a deep and narrow vale, around which the hills rise swiftly on every side. It has the appearance of being, in former years, a place of much greater consequence than at present'.

'Soil – light and sandy, chief crops oats and barley, turnip husbandry succeeds well, potatoes excellent, some peat, coal plenty from Tindell-fell, lime 6d a bushel, ashes 3, dung 1s 6d per cart. Not a breeding county'.

CWAAS Transactions

No mention of Hembles Gate

Principal Inhabitants of Cumberland and Westmorland 1829 - Compiled by R

Grigg 1988 Beewood Coldell

Ramshay & Co, Brewers, Brampton

Tithe Map for the Parish of Brampton 1849 (CRO)

Plot 492 – Hembles Gate

Landowner – Thomas Ramshay Esq

Occupier – Susannah Gill

[Marked Hembles Gate on map, but called Himbels Gate in listings that accompany the map]

Directory of Cumberland and Westmorland – Parson and White 1829

'Brampton is an ancient, but neat market town seated in a deep and narrow vale, 9 ½ miles ENE of Carlisle, 11 miles ESE of Longtown, 46 miles W of Newcastle upon Tyne, and 313 miles NNW of London. Its principal support is its weekly market (*Thomas de Multon*, Lord of Gilsland obtained a royal grant for the markets and fairs at Brampton in the 37th [year] of Henry III), which is held on Wednesday, and is well supplied with corn and all kinds of provisions'.

Population of Brampton parish: -

1801 - 1682

1811 - 2043

1821 – 434 houses, 576 families and 2448 persons

Joseph Hetherington – Farmer, Hembles Gate

Pigot's Directory 1828-29

In Brampton parish – Hembles Gate is not listed amongst mills, and farmers are not listed

Directory of Cumberland – Mannix and Whellan 1847

'John Ramshay, Esq., agent to the right hon. George, Earl of Carlisle'

Sush. Gill – Farmer, Hemel-gate

Halliburton and Gill – Farmers, Warren House and Hemel-gate

<u>History and Topography of Cumberland and Westmorland – Whellan 1860</u>

Brampton Parish

'This parish is bounded on the north by a detached portion of Upper Denton, Lanercost and Walton; on the west by Irthington; on the south by Hayton and Farlam; and on the east by Nether Denton. It lies between the rivers Gelt and Irthing and possesses in general a light sandy soil, producing good crops of oats, barley, turnips etc. Good coal is found at Tindale Fell, in the vicinity of which is a small lake called Tindale Tarn, about two miles in circumference, which abounds with perch, pike etc. The parish comprises the township of Brampton, Easby and Naworth, whose united area is 16,970 acres'.

Brampton Township

'The area of this township is included in the parish returns; its rateable value is £7642 1s 7d. The population in 1801 was 1682; in 1811, 2043; in 1821, 2448; in 1831, 2842; in 1841, 2754, and in 1851, 3189. The manor of Brampton is included in the barony of Gilsland, an account of which will be found under Naworth township'.

Directory and Gazetteer of Cumberland 1861

William Palmer, Farmer, Hemblesgate

Slater's Directory of Cumberland and Westmorland 1869

William Palmer, Farmer, Hemblesgate

<u>Slater's Directory of Cumberland, Durham, Northumberland and Westmoreland 1884</u>

'The Earl of Carlisle is lord of the manor or honour, and holds a court in April an October in the Moot Hall. The parish church of St Martin is a neat stone structure, rebuilt in 1878 by public subscription, contains a peal of bells with a fine organ, presented by the late vicar, the Rev Thomas Ramshay'.

William Laiddler, Hemblesgate [No listing of Hembles Gate under millers]

Kelly's Directory of Durham, Northumberland and Cumberland 1894

William Lardler, Farmer, Hemblesgate

T Bulmer & Co. History, Topography and Directory of Cumberland 1901

'Brampton lies between the rivers Irthing and Gelt, and possesses in general, a light sandy soil, producing good crops of wheat, oats, barley and potatoes etc'.

'Brampton Township – The principle owners of this part of the parish are the Earl of Carlisle, the Exors. Of Thomas Ramshay Esq and the resident yeomen'.

'The town of Brampton is a place of considerable antiquity, and has possessed the privilege of a market town for more than 600 years. It is situated in a vale surrounded by an amphitheatre of hills, whose wooded slopes and verdant sides add to the beauty of the scene. Weaving and coal mining were formerly carried on to some extent, but both industries are now extinct. The market is held on Wednesday, and is numerously attended by the farmers of the surrounding district; there are also four annual fairs for sheep and cattle, viz., on the 20th April, the second Wednesday after Whit-Sunday; the second Wednesday in September and the 23rd October. Both the market and fairs date from an early period being held pursuant to a charter obtained in the year 1252 by

Thomas de Multon, lord of Gilsland. The Newcastle and Carlisle railway passes within a mile and a half of the town'.

Listed under Farmers is:-William Laidler, Hembles gate

Kelly's Directory of Cumberland and Westmorland 1914

William Laidler, Farmer, Hemblesgate

[Presumably the same gentleman as the directories of 1884 and 1894, but different spellings]

Kelly's Directory of Cumberland and Westmorland 1928

Robert Dixon, Farmer, Hemelsgate [not listed as a farm over 150 acres]

Kelly's Directory of Cumberland and Westmorland 1934

Robert Dixon, Farmer, Hemelsgate

Cumberland Directory 1954

John C Foster, Hemblesgate, Tarn Road, Brampton

Sales Particulars for Hemblesgate, Brampton 1920 (CRO DB/74/3/2/502) Accompanies the map shown in Figure 6

3

LOT 1.

One of the Best STOCK AND DAIRY FARMS in the District, situate in the Parish of Brampton, close in to the Market Town, near Railway, and known as

HEMBLESGATE

comprising in all about 130a. 0r. 32p. of first-rate Arable, Meadow, and Pasture Land.

The well-sheltered Farm House (with the Geltsdale Water Supply laid on), all stone-built and slated, contains—Kitchen, Back Kitchen, Dairy, Wash House, and 5 Bedrooms.

The Homestead, an excellent and commodious building, is stone-built and slated, and contains—Wash House, Loose Box, Byre for 8, Calf Boxes with lofting over all, Turnip House, Byre for 20, Loose Box with Hen Loft over, Trap House, Byre for 8 with Threshing Loft over, Threshing Barn with machinery driven by water power, Water Wheel and House, Stable for 6 with lofting over, open Cart Shed, Hen House and Piggery, good Water Supply from Mill Stream.

SCHEDULE OF LANDS COMPRISED IN THIS LOT.

| No. on Ord. Map, 2nd Edition. | De | escription. | | | reage. R. | P. | Cultivation. |
|----------------------------------|-----------|-------------|---|--------|--------------|----|---|
| 494 | | | | 3 | 0 | 28 | Pasture |
| 495 | | | | 0 | 2 | 8 | Wood and Woodland |
| $520 \\ 521 $ | | | | 24 | 0 | 36 | Arable, Meadow, Garden Ground, Wood & Woodland |
| 519 | Rese | rvoir | | 0 | 0 | 36 | , |
| 856 | | | | 0 | 3 | 34 | Pasture |
| 518 | | | | 1 | 3 | 7 | Pasture |
| 857 | | | | 0 | 3 | 1 | Pasture |
| 858 | | | | 0 | 1 | 22 | Wood and Woodland |
| 516 | | | | 15 | 2 | 7 | Arable and Pasture |
| 517 | | | | 20 | 3 | 36 | Arable |
| 506 | | | | 25 | 0 | 7 | Arable |
| 504 | | | | 3 | 1 | 27 | Wood and Woodland |
| 503 | Stac | kyard | | 0 | 1 | 35 | |
| 502 | Homestead | | 0 | 1 | 24 | | |
| 500 pt. | | | | 11 | 1 | 37 | Arable |
| 397) 505 | | | | 20 | 3 | 7 | Arable, Wood & Woodland |
| | | | | A. 130 | 0 | 32 | |
| | | | | - 1 | | | |

The above farm is in the occupation of the late Mr. William Laidler's representatives, along with other lands.